Carbon Capture & Storage: Legal and Regulatory Issues

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Legal & Regulatory Issues

- Property rights for transport and storage
- Environmental permitting, risk management
  - Onshore and offshore
- Pipeline access, health & safety regulations
- Long-term liability frameworks
- Jurisdictional issues
- Need to develop regulatory models for early projects and adapt as knowledge is gained

All of these issues impact financing/cost
Current Developments

- EU “Enabling” Framework
  - Member States determine whether and where CCS will happen
  - Companies decide whether to use CCS on the basis of conditions in the carbon market
  - Permitting for CO₂ storage
    - Monitoring and reporting guidelines under EU-ETS in order to quantify any leaked emissions (proposal expected end 2008)
  - ETS auctioning revenues major potential source of funding for CCS demonstration
  - Transfer of responsibility to the state under clear conditions to avoid distortion of competition
Current Developments Cont’d.

- USA
  - Jurisdictional issues:
    - Capture - US EPA’s Clean Air Act
    - Transport - US Department of Transportation
    - Storage - US EPA’s Safe Drinking Water Act
      - State/federal split of responsibility
      - Proposed rule for CO$_2$ published by summer 2008, final 2010
  - Legislation likely needed
    - Treatment under the Clean Air Act
    - Accounting for Injection and Any Leakage
    - Long-term Liability
Current Developments Cont’d.

● Australia
  ◆ Will build from Offshore Petroleum Act platform
  ◆ Acreage release, property access
    ■ Oil & gas and CO₂ storage activities will overlap
  ◆ Legislation will provide the regulator with broad powers to direct the project to take mitigation and remedial actions

● Canada
  ◆ Lack of financing for demonstration projects
  ◆ New federal GHG regs will require CCS at new oil sands and coal-fired electricity plants by 2018
  ◆ Liability for storage sites
    ■ Need to clarify, likely provincial (GHG fed’l)
  ◆ Need to establish M&V standards
Current Developments Cont’d.

- Japan - Adopted legislation implementing London Protocol amendment
  - Min. of Environment will issue permits
    - Site selection report
    - Environmental impact assessment report
    - Explanation for no appropriate disposal is available other than sub-seabed storage
    - Financial capability of the applicant
    - Technical capability of the applicant
    - Project lifetime document
  - CO2 purity requirement: ≥99%
Current Developments Cont’d.

- London Protocol/OSPAR 2007 Amendments on CCS: CO₂ now may be dumped at sea, but:
  - Disposal must be into a sub-seabed geological formation
  - Disposed matter must be “overwhelmingly” CO₂
  - No wastes or other matter may be added
  - Disposal must be permitted by national authority

- UNFCCC – including CCS in the CDM
  - May 2006 Workshop highlighted following issues
    - Project boundary concerns
    - Accounting for leakage resulting from the additional energy required
    - Ensuring the permanence of stored CO₂
  - Series of workshops/consultations; next submissions 6/08
  - Path forward: a simplified CCS project method
IEA Secretariat CCS Work

- High-level recommendations for G8
- Legal & regulatory frameworks
  - *Legal Aspects of CO₂ Storage* publications
  - 13-14 May 2008: International CCS Regulators’ Network launched
    - Future web conferences on specific topics
      - 10 July: CO2 transportation health & safety issues
    - Global updates on regulatory/legal developments
    - Outreach to developing regions
    - Annual meeting
  - October 2008: new CCS publication
    - CCS/GHG market mechanisms analysis
  - March 2009: high-level CCS Summit
Thank You

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www.iea.org/Textbase/subjectqueries/cdcs.asp